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IN THE CLAIMS

What is claimed is:

1. (previously amended) A method of forwarding diagnostic messages among members of groups in a data processing system while the members are executing protocols, comprising the steps of:

attaching a header to the message, the header including the following header fields:

- (1) a protocol handle identifying the originator protocol from which the request originated; and
- (2) a forwarding handle of null value identifying, if present, a an original protocol which is the current parent of the protocol;

sending the diagnostic message to the member of the group identified by the forwarding handle which originated the protocol.

2. (cancelled)

3. (previously amended) The method of Claim 1, further including the step of:
including in header to the message an identifier of the member and group which originated the message.

4. (original) The method of Claim 1, further including the step of:
including in the header to the message an identifier of the member and group of the parent protocol originator, if any, which originated the message.

5. (previously amended) A computer system including a plurality of groups, each group composed of one or more members, said computer system forwarding diagnostic messages among the members of the groups and including:

means for forming a message including in its header message the following header fields:

- (1) a protocol handle identifying the originator protocol from which the request originated; and

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(2) a forwarding handle of null value identifying, if present, an original protocol which is current parent of the protocol:

means for sending the diagnostic message to the member of the group identified by the forwarding handle which originated the protocol.

6. (cancelled)

7. (original) The computer system of Claim 5, wherein said means for forming a header message further includes:

means for including in the header to the message an identifier of the member and group which originated the diagnostic message.

8. (original) The computer system of Claim 5, wherein said means for forming a header message further includes:

means for including in the header to the message an identifier of the member and group of the parent protocol originator, if any, which originated the diagnostic message.

9. (currently amended) A computer memory element containing stored in signal bearing media a diagnostic message to be forwarded among members of one or more groups in a computer system and utilized therein, the stored diagnostic message containing a header message including the following header fields[:];

(1) a protocol handle identifying the originator protocol from which the request originated[: and];

(2) a forwarding handle of null value identifying, if present, [[a]] an original protocol which is the current parent of the protocol; and
instructions for sending the diagnostic message to the member of the group identified by the forwarding handle which originated the protocol.

10. (original) The computer memory element of Claim 9, wherein the header message contained in the stored diagnostic message further includes:

an identifier of the member and group which originated the diagnostic message.

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11. (original) The computer memory element of Claim 9, wherein the header message contained in the stored diagnostic message further includes:

an identifier of the member and group of the parent protocol originator, if any, which originated the diagnostic message.

12. (previously amended) A method of forwarding diagnostic messages among members of groups in a data processing system to those members executing protocols implicated by the message, comprising the steps of:

forwarding as part of the diagnostic message a header including the following header fields:

(1) a protocol handle identifying the originator protocol from which the request originated; and

(2) a forwarding handle identifying, if present, a protocol which is the current parent of the protocol;

examining the forwarding handle at each member of the groups of the system to ascertain if that member was a parent of the protocol identified in the forwarding handle field of the header of the diagnostic message;

forwarding another diagnostic message having a header including the following header fields:

(1) a protocol handle identifying the originator protocol from which the request originated; and

(2) a forwarding handle identifying, if present, a protocol which is the current parent of the protocol.

13. (cancelled)

14. (previously amended) The method of Claim 12, further including the step of:

sending the diagnostic message to the member of the group identified by the forwarding handle of another diagnostic message.

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15. (previously amended) The method of Claim 14, further including the step of repeating the steps of Claims 12 and 14 until the forwarding handle of the header field indicates the protocol is an original protocol.